Monitoring and selection effects: targets and performance of four experiences in microfinance

De Crombrugghe, Alain; Collin, Jean-Denis; d'Huart, Patrick

Publication date:
2004

Document Version
Peer reviewed version

Link to publication

Citation for pulished version (HARVARD):
De Crombrugghe, A, Collin, J-D & d'Huart, P 2004, *Monitoring and selection effects: targets and performance of four experiences in microfinance*. FUNDP. Faculté des sciences économiques, sociales et de gestion. Working papers, vol. 267, FUNDP. Faculté des sciences économiques , sociales et de gestion, Namur.

FUNDP
The University of Namur

Faculté des Sciences économiques,
sociales et de gestion

8, Rempart de la Vierge
5000 Namur
Belgium

www.fundp.ac.be/eco

Working Papers

Research Series
No. 267 — 2004/8

A. de CROMBRUGGHE, J.D. COLLIN, P. d'HUART

MONITORING AND SELECTION EFFECTS: TARGETS AND PERFORMANCE OF FOUR EXPERIENCES IN MICROFINANCE

Décembre 2004

Centre de Recherches
En Economie
du Développement
(CRED)
&
Center for Research in
Finance and Management
(CeReFiM)

MONITORING AND SELECTION EFFECTS : TARGETS AND PERFORMANCE OF FOUR EXPERIENCES IN MICROFINANCE*

by
Alain de CROMBRUGGHE** Jean-Denis COLLIN and Patrick D'HUART
UNIVERSITY OF NAMUR (Belgium)

ABSTRACT

This paper discusses four experiences in microfinance on the basis of field observations of two to four months in residence, two in Cameroon, one in Bosnia and one in Haiti. The observed microfinance institutions (MFI) seem as expected to fill a market gap and thus to contribute to the welfare of their customers or to the development of small businesses. Most customers are satisfied and come back, without falling in a debt trap. The various ways the observed microfinance institutions (MFI) deal with market imperfections reflect the various needs and capabilities of their targeted customers or members. Costs of operation remain high, and the quality of the management seems more important to customer satisfaction and to the durability of the operations than the availability of grants or the reliance on gender or group mechanisms. We noticed, e.g. that lending more to women than men in a mixed set-up did not automatically reduce arrears, and we found indications that older microfinance units may accumulate more arrears than new ones. The importance of offering savings services next to credits also appears, especially from the activities and declared uses of funds of the institutions serving the lowest income groups.

CONTENTS

* This paper was first presented at the National Seminar on Microfinance for the Poor at the Xavier Institute for Development Action and Studies (XIDAS) in Jabalpur, M.P., India on December 4, 2003. I am grateful to seminar participants at XIDAS and to Jean-Philippe Platteau and Michel Tenikue for their useful comments. This research benefited from the hospitality of PCRD and CamCCUL in Cameroon, MCN in Haiti, MEB in Bosnia, and from discussions with the staff of IPC in Germany and with Philippe Dubin and Hubert Ngnodjom at the Faculté des sciences sociales et de gestion, Campus of Ekonou, Université Catholique d'Afrique Centrale in Yaounde, Cameroon. At the time of the research, all authors worked at the University of Namur. All errors and omissions remain under the responsibility of the first author.
** Corresponding author, Department of Economics, Facultés Universitaires Notre-Dame de la Paix (FUNDP-University of Namur), 8 Rempart de la Vierge, B-5000 Namur, Belgium, alain.decrombrugghe@fundp.ac.be, http://www.fundp.ac.be/~adecromb

MONITORING AND SELECTION EFFECTS : TARGETS AND PERFORMANCE OF FOUR EXPERIENCES IN MICROFINANCE

Introduction: objectives of microfinance and field observations

Microfinance develops under various forms in various parts of the world and for various types of clients. It typically targets creditworthy clients who operate with very small amounts of savings and of credit. It intends to give them access to formal credit and to other financial services. Such clients usually don't have access to large banks. Indeed banks fear the administrative cost of managing small accounts and require material guarantees (collateral) that such clients cannot provide. The originality of microfinance institutions (MFI's) is then their ability to reduce or transfer some of the transaction costs and to ensure repayment by finding alternatives to the material guarantees usually requested by banks. The challenge is to cover the remaining costs with interest rates that the targeted borrowers can afford. In addition, the charged rates must compete with those offered by private moneylenders without creating the personal dependency relations which often characterize transactions with moneylenders, but also without distorting completely the local financial market. The originality of microfinance is well discussed in a broad socio-economic perspective by Robinson (2001), while a good survey of the economic literature is offered by Morduch (1999).

The purpose of the services offered by microfinance institutions is to improve the welfare of their members or customers and often also these people's production possibilities. The MFI's intend to reach this objective while also aiming at financial sustainability, i.e. being able to fund their credit activity with funds borrowed at market rates and to eventually abandon any reliance on subsidies. A specific targeting of the poor is often added to the objectives of microfinance, especially by NGO's. Ledgerwood (1999) presents a management-oriented survey of the objectives of microfinance and the related management issues.

This paper examines how microfinance institutions deal with their specific purposes and the ensuing challenges in four specific environments which kindly opened their doors to our research or even hosted some of us for internships.

We collected data from two institutions in Cameroon in late 2001. These institutions function on the basis of membership and offer both saving and credit services involving rather small amounts of money. We collected data from one small-enterprise bank in Bosnia in late 2001, and from a credit institution for small entrepreneurs in Haiti in late 2002. The Bosnian institution offered savings services, but drew most of its finance from other sources. The institution in Haiti was a lending organization, drawing its funds mainly from a large local bank. This bank was interested in reaching another type of borrowers through a specialized intermediary. First hand observation of the institutions in Cameroon can be found in Collin (2002) and Castaigne (2002), of the Bosnian case in de Pret (2002) and of micro-credit in Haiti in d'Huart (2003). The present paper is a reflection on these four experiences. The diversity of these four institutions is also an aspect of microfinance of which the paper will try to give an account.

The paper proceeds along 6 sections. The first section briefly describes the institutions, their source of funds, targeted clients and typical credit contracts. The second section studies more specifically the way microfinance institutions deal with information asymmetries and enforcement problems. Section 3 discusses sustainability, cost and revenue. Section 4 looks at competition and alternatives. Section 5 sketches the welfare effects and section 6 concludes.

1. The visited institutions

1.1. Cameroon: PCRD

The Decentralized Rural Credit Program (PCRD, Programme de Crédit Rural Décentralisé) was launched in 1995 in the central region, which is a rain forest region in central Cameroon. It was supported by the Ministry of Agriculture and by the "Centre International de Développement et de Recherche" (CIDR), a French NGO.

A unit is created in a village if there is sufficient interest after a period of information of 6 months. These units are supervised by a district structure. There are 7 districts. There is a membership fee and members can deposit savings. At the village-level the management is voluntary. The cashier can receive a share in the annual profits.

In addition to using local savings and contributions, units can borrow from BICEC a local bank majority-owned by a French bank (Banque Populaire). Training, expertise and supervision is largely financed through cooperation funds from the French and the European authorities. In principle, there is a clear division in funding: donated cooperation funds are for services, while credits must be financed by interest-bearing borrowed funds.

The data used in this paper were collected through interviews of PCRD-members in two villages (15 in each), of managers in ten, and in the financial statements of 152 units on 31 August 2001.

1.2. Cameroon: CamCCUL

The Cameroon Cooperative Credit Union League (CamCCUL) is a network of cooperative credit unions. It was launched in 1963 in English-speaking western Cameroon, but got new attention and opportunities with the 1992 law on credit cooperatives (Coopec) and with the support of Canadian and Dutch development funds. CamCCUL runs a bank which serves the cooperatives. It offers its financial know-how and its label in exchange for a deposit in the bank and participation in the network's activities.

Some of the affiliated credit unions already existed before joining the network or taking the form of credit cooperatives under the law of 1992. Individual affiliation is not necessarily village-based. One of the cooperatives is company-based, for instance. Each union hires and pays a manager. Network control units monitor about 20 unions. The network is rather large, grouping 295 unions and accounting for about half of the formal microcredits issued in the country. The whole microfinance was estimated to be worth about 4% of the credit market and 6% of the deposit market in 2000[1].

Unions collect largely more saving than they issue loans. Their surplus is deposited in the network's bank which deals with other commercial banks of the country. Members pay a membership fee, but each union can also receive deposits from non-members provided they satisfy some regulations.

Our data come from interviews of the members of two credit unions (15 in each) and of the managers of ten, as well as of the financial statements of these 10 units on 31 December 2000.

[1] CRETES study for COBAC (Commision Bancaire d'Afrique Centrale), quoted by COLLIN (2002), p. 53.

1.3. Bosnia: MEB (Micro-Enterprise Bank, IPC)

The Micro-Enterprise Bank (MEB) was founded in 1997 to contribute to the reconstruction of Bosnia after the war and to smooth the transition from state-ownership to private entrepreneurship. It started with loans between 1000 and 25000 euros (or dollars). The bank has now been renamed "ProCredit Bank", but the formula has been exported under the name "MEB" to Kosovo and to other areas in reconstruction in South-Eastern Europe. The bank also accepts deposits from the general public.

The bank's main shareholders were (and still are) the EBRD[2], the IFC[3] and Internationale Micro Investitionen AG (IMI), the investment arm of Interdisziplinäre Projekt Consult GmbH (IPC)[4] which itself operates as the technical advisor of the bank. The bank "aims to achieve a sustainable return on investment"[5] and to "foster economic development by giving business the means to grow"[3] with affordable and targeted services. The concept is clearly commercial, but the market started with micro enterprises and now moves upwards as the clients themselves grow. The information was collected mainly at the headquarters in Sarajevo in 2001-2002 during an internship which also focused on a product development project[6].

1.4. Haïti : MCN (Micro Crédit National, IPC)

Micro Crédit National s.a. was launched in 1999 in Port-au-Prince, Haiti. Its main shareholder is the second largest bank of the country, Unibank s.a.. IFC and IMI, among others, contributed also and IPC is the technical advisor, thus the same management and broadly the same partners as for MEB in Bosnia. The concept is commercial again, aiming at financial sustainability but targeting the market segment of the small entrepreneurs, with loans starting at about 100 US dollars. Deposits are not sought after.

The bank borrows its resources mainly from its main shareholder Unibank s.a.. Its clients are individual entrepreneurs, mainly active in domestic and international (i.e. U.S.A.) trade.

The data were collected at the Port-au-Prince headquarters and during visits at some provincial branches, which were already 9 in 2002. The data collection focused on risk management and risk indicators[7].

1.5. Key parameters of the credit contracts

All microfinance credit contracts studied have high nominal and real interest rates, short maturities and frequent installments. Table 1 gives an overview of the main parameters of the credits issued by the institutions studied.

Almost all the observed credit contracts are individual contracts. Group mechanisms intervene to assemble the membership of the institutional units in Cameroon. They also intervene in the PCRD-Cameroon for the allocation of the credit, which is discussed in the village unit. The credit institutions run by IPC in Bosnia or in Haiti do not rely on group mechanisms at all. In MCN-Haiti, though, individual personal guarantees are often sought, credit agents enquire about the reputation of the borrower, visit his home and business

---

[2] European Bank for Reconstruction and Development with headquarters in London.
[3] International Finance Corporation, the commercial lending arm of the World Bank.
[4] Consultancy headed by Dr. Claus Peter Zeitinger in Frankfurt, Germany.
[5] http://www.meb.ba : mission.

[6] De Pret, Valentine (2002)
[7] D'HUART, Patrick (2003)

premises, while borrowers themselves seem to care about their reputation, especially those living outside the capital city.

Guarantees are scarce, as is well known in microfinance. The borrowers of IPC-led lenders in Haiti or Bosnia provide some material guarantees, but enforcing such guarantees seems difficult in Haiti, where personal guarantees (*avaliseurs*) are more common. In Cameroon, some units of CamCCUL have a right to seize the wage of the members (company-based credit union) but never seem to do it.

In addition to the interest rate, there is often a fixed application fee or entry fee. This is an attempt to cover the fixed cost of the loan, although this upfront fee is often proportional to the borrowed amount (say 2% of the credit). CamCCUL insists on a savings history and requires that a given amount remain on a blocked account.

Table 1: Key parameters of credit contracts

	PCRD Cameroon 2001	CamCCUL Cameroon 2001	MEB Bosnia 2001	MCN Haiti 2002
Typical amount range USD	50-1000	50-2000	1000-25000	25 -15000
Typical maturity	6 months	1 year	1 year	1 year
Typical nominal interest rate	4% month 48% year	2% month 24% year	20% year	5% month[8] 60% year
Installments	Monthly interest	Monthly Interest	Monthly Interest and capital	Monthly Interest and capital
Capital	At maturity	At maturity	Monthly	Monthly
Grace period	2 months interest bearing	2 months or more, interest bearing	None or new contract	None or new contract
Guarantees	None, membership	Some, but non execution	Material	Mainly personal
Memorandum items:				
Deposit rate	2% month	n.a.	n.a.	n.a.
Inflation rate (annual)	3%	3%	8%	12%

2. Information asymmetry and enforcement of contracts

2.1. The role of financial institutions

The value added of any form of financial intermediation is not only to match the funds of one or many agents in (temporary) surplus and the demands of borrowers: banks also offer a lending management service to their depositors (Mishkin & Eakins, 2000). Indeed lending is risky on various counts: bad will of the borrower, asymmetric information between lender and borrower and exogenous shocks. Regarding borrowers who are unwilling to repay despite their ability to do it, banks develop ways of enforcing the contracts and use legal procedures. Other borrowers may be willing to repay, but be unable to do so, and this may have to do

[8] On remaining capital (outstanding balance): given that monthly installments include capital repayments, this is equivalent to a 3% monthly flat rate on the borrowed capital.

with three different problems. A first problem is simply the inability of some people to manage money and the asymmetric information about this between the lender and the borrower. To deal with this problem, banks develop selection mechanisms. They try to collect relevant information in a systematic way or they try to solve the asymmetric information problem through specific requirements linked to the lending contract. These requirements act as a self-selection mechanism among the borrowers as they tend to be accepted or fulfilled only by the most able. A second repayment problem is that able borrowers may sometimes fail to work as well as expected to be able to repay a loan and its interest (moral hazard problem). To deal with this second problem, banks monitor their clients and devise incentive schemes, e.g. through guarantees. A third cause of non payment finally is exogenous adverse shocks which accidentally destroy the repayment means of some borrowers. This last problem doesn't involve any bad will or any asymmetric information problem. Banks nevertheless also have to deal with such adverse shocks. They do so by accumulating high reserves and by diversifying on many borrowers facing uncorrelated hazards. They sometimes reschedule debts but don't often forgive them.

Beside banks, professional lenders also develop information-processing or revelation techniques in order to select and monitor borrowers better than individual or non-informed lenders could do. They also need enforcement mechanisms especially in the case of bad will of the borrower. Moneylenders operate with their own funds, and often have a strong informational advantage in a well controlled circle, where they can also rely on informal enforcement mechanisms.

In contrast with individual moneylenders, banks and other financial institutions often operate with borrowed or entrusted funds and rely on structured information collection and formal enforcement systems. For small amounts of credit, the cost of processing information may seem too high compared to the fees and charges and especially to the interest margin that can be earned on this small base. Microfinance institutions develop ways to reduce or to transfer these costs.

Asking for collateral (material guarantees) or personal guarantors is a way for banks to select borrowers. Collateral signals the potential of the project as recognized by the borrower and the guarantors. Moreover collateral discourages risky behavior of the borrower (moral hazard) and unwillingness to pay (sometimes called *ex-post* moral hazard). Practically, however, collateral seems hard to seize in Cameroon and in Haiti. Nevertheless the threat of seizure is sometimes used to put pressure on a borrower. In Haiti, the credit agents of MCN visit the house and the premises of the borrower in order to assess the creditworthiness and the implicit collateral of the borrower.

2.2. Group lending

Transferring the selection and monitoring cost from the financial institution to a group of borrowers (e.g. Armendariz de Aghion 1999) is often presented as the way through which microfinance can afford to reach poor clients, while mitigating adverse selection and moral hazard problems[9]. Sometimes group formation is also seen as a way to reach people who wouldn't think of asking a formal credit or as a way to empower poor people. These last two issues will be discussed in section 6 about the impact of microfinance.

[9] Group mechanisms, as a selection device (GHATAK 1999) but even more as a monitoring device have been discussed extensively in the literature, e.g. BANERJEE, A., BESLEY, T., & GUINNANE, T. (1994), BESLEY, T. & COATE, S. (1995), GHATAK & GUINANE (1999), STIGLITZ, J. (1990), VARIAN, H. (1990).

Among the observed institutions, group lending strictly defined[10] was almost absent. It is mainly in CamCCUL Cameroon, that some units offered loans to groups. In CamCCUL group-membership represented 3% of the membership, 1,58 % of the outstanding loans, and 2,3% of the lent amounts. In one unit only, group lending reached 10%. In the PCRD sample, group membership was 2%, group lending 1% and amounts lent to groups 3% of the corresponding totals.

This limited occurrence of group lending strictly defined should not lead to the conclusion that social capital did not play a significant role in the observed institutions. Indeed, in Cameroon, all the microfinance units of PCRD and of CamCCUL operate on the basis of membership, and membership is linked with some common characteristics of the members like belonging to the same village community, running the same type of business, working in the same company, a.s.o.. Thus, we almost do not observe lending to "groups within the group", but we do observe lending to individuals within a group.

In PCRD-Cameroon, group selection indeed occurs in the formation of the village unit. Within the village, there doesn't seem to be a severe exclusion, but there is no 100% membership either. There is a group decision on the allocation of loans, but there is no formal collective responsibility for payments. There doesn't seem to be a strong competition for funds, so there is no "queuing" for loans, which could serve as an incentive to show a good credit potential or history.

The membership of CamCCUL units originates in various ways. The main determinant to get access to a loan seems to be the record of past personal savings. Savings must be deposited as a guarantee to obtain a loan. This also serves as an incentive to repay, especially in the case of reliable borrowers, who do not intend to simply disappear with the difference between their loan and their savings. There is no collective responsibility for payments.

In Bosnia and in Haiti, the studied microfinance institutions do not rely on membership, let alone groups. Nevertheless, social capital is often requested in the form of personal guarantors. In addition, credit officers ask how the new clients learned about MCN or whether they know other clients. Officers also take a look at the neighborhood of the borrower.

2.3. The standardization and scoring approach

Given the high cost of information collection, the problems of group formation, doubts about the effectiveness of groups and the lack of material guarantee which can be seized, another approach of small clients can be tried. This approach consists in standardizing the loans and in offering them to borrowers with specific characteristics which seem to be good predictors of repayment (Schreiner 2002 and 2004).

The simplest form of selection is to target the loans to women. This has been practiced by Grameen Bank in Bengla Desh. In none of the four systems we observed was there such a targeting by gender. On the contrary, in Cameroon the members (60% on average for 152 PCRD units) as well as the borrowers (67% of the same sample) of the observed units were men in majority. Table 2 gives the number of outstanding credits at the end of 2000 for a sample of 8 units of CamCCUL for which we could get detailed data. The percentage of these loans going to women, reaches 50% in one case only. This underrepresentation of women may partly be explained by the existence of alternatives targeted to women (see

[10] Group lending of the Grameen-type seems very specific. The borrowers first select themselves. Then they are collectively responsible for payments due by the first of them who received a loan, and subsequent loans to other members depend upon the group being current on all dues.

"competition" in section 6) as women seem to be more active in rotating savings and credit associations (Roscas), called "tontines" in Cameroon.

Table 2. Loans and arrears by gender for 8 units of CamCCUL (Cameroon)

Union	A	B	C	D	E	F	G	H
Loans	43	178	90	34	353	52	97	49
Percentage of all loans, current or in arrears, outstanding to								
Women	*51*	*33*	*44*	*18*	*41*	*29*	*22*	*39*
Percentage in arrears of 1 month or more on 31 Dec. 2000 of loans to								
Men	*71*	*59*	*59*	*44*	*39*	*72*	*63*	*75*
Women	*82*	*48*	*55*	*17*	*20*	*33*	*29*	*63*
Source: "*Rapport d'audit des comptes annuels 2000 et budget 2001" of each of these 8 units.*								

Table 2 also shows a sample of repayment performances by gender. Arrears in excess of one month occur more often among men than among women except in unit A. In units B, C and H, the difference between arrears among men and women is not large, as table 2 also shows.

For the PCRD, we our data for 152 units on 31 August 2001 give lending by gender, but arrears are not disaggregated by gender. Reported failure rates could be regressed on a number of characteristics of the borrowers and of the reporting unit itself. The regression is reported in the appendix table. The regression results suggest that a higher proportion of women among the borrowers leads to a higher failure rate at the unit level holding other characteristics constant. While this regression is not an attempt to build a scoring system, its results cast doubts on the common opinion about the superior performance of women, at least in this specific context, where men and women borrow from the same unit[11]. The type of use of the loan (trade, agriculture, social expenditure, housing or other) doesn't have a significant effect on the failure rate in the regression. Other significant coefficients in the same regression, like the effect of the age of the unit and the effect of its resource utilization rate (lending/savings) will be discussed below with the management of MFI's (see 3.4.).

For MCN loans in Haiti, we didn't perform a regression analysis but we could classify 7471 loans according to their size ("mini", "micro", "petit", in growing size order), the activity of the borrower (trade, services, production) and the history of the borrower (first loan to this client or further new loan to a faithful client). The percentage of non-performing loans in each of the 18 subgroups is reported in the second appendix table. It shows that the highest share (54%) of credit with at least 21 days of arrears at MCN in Haiti is found among credits in the highest amount range ("petit credit"), to a new client engaged in production[12]. The lowest proportion (6%) is found in the lowest amount range ("mini credit"), to a returning client engaged in trade. Contrary to PCRD-Cameroon, it seems that the activity of borrower affects the repayment rate at MCN-Haiti, as suggested by the superior performance of trade-related credits. MCN doesn't discriminate interest rates according to activities (despite the better track record of trade), but charges a slightly lower rate (about 1 percentage point rebate) to returning clients (as an incentive and reward for prompt payments, and appendix 2 shows

[11] This result can hardly be ascribed to easier free-riding by men in units where a large number of reliable women ensure the viability of the system, the size of the sample make the occurrence of such a special case very unlikely. The data in table 2 do not support such an interpretation either. Ledgerwood (1999, p. 37) recognizes that the common perception about better repayment rates of women is largely based on positive experiences of programs for women only (Grameen e.g.) without test groups of men, and that little evidence is available in mixed settings as the ones we observe here.

[12] Credits combining these 3 unfavourable characteristics amount to 22 of all 7471 credits (0,29%) and to only 3% of all credits having once exceeded 21 days of arrears.

indeed very low arrears for all types of returning clients) and/or to loans in the largest amount range. This rebate on large loans is probably not justified by the better performance but rather by the lower administrative cost per dollar lent and by the competition of other banks for larger loans.

Standardization of the loans and hence of the paperwork (and today of the computer work, at least at MCN and MEB) also contributes to a reduction of the administrative cost of the lending activity. This is especially important when small amounts are lent.

2.4. Management : Proximity, motivation and close monitoring

Information asymmetry, both ex-ante (adverse selection risk) and ex-post (moral hazard risk) seems to be largely dealt with through active information gathering by the credit officers, especially in the IPC-led institutions. Signals take other forms than guarantees or group selection: they are savings accounts and other assets, and reputation. Incentives also take other forms than guarantees: the most commonly quoted incentives to pay in Haiti are the hope to obtain further credits (45% of respondents) and the fear to lose a good reputation (20% of respondents). In Cameroon, some borrowers mentioned in interviews the hope to get further loans as an incentive to pay. Indeed, 43 interviewed borrowers in two PCRD-villages, had taken 108 loans together, of which 65 went to returning borrowers. Of these loans, 90 had been fully repaid and 18 were ongoing. This incentive effect of further loans may be especially strong among the borrowers of MCN in Haiti who borrow working capital and need refinancing, it may be related to the incentive effect of terminations studied by Stiglitz and Weiss (1983).

Given that the borrowers don't directly bear costs to produce specific signals or to submit themselves to incentive-schemes, they actually bear the cost of asymmetric information problems in the form of high interest rates. These high rates pay for the information-gathering cost borne by the IPC-system (Bosnia, Haiti), or they partly cover the losses recorded in some less tightly monitored and enforced credit programs observed in Cameroon.

All observed microfinance schemes required frequent installments from the borrowers, at least a monthly interest payment in Cameroon, while installments included interest and capital in Bosnia and in Haiti. These frequent payments from borrowers are the first indicator used by the credit officers in their monitoring task. This frequency of financial contacts plays an important role in maintaining good repayment rates according to the management of all four institutions.

In Haiti, as well as in Bosnia, IPC developed intensive internal information and reporting systems. Agents spent time visiting customers and their neighborhood. Despite the cost, MCN relied largely in Haiti on the contacts developed by the credit officers. Arrears could not be left unnoticed. To add incentives to the information-gathering efforts of its officers, MCN devised a system of bonuses related to the credit files they manage and a system of bonus reductions related to credits in arrears. Direct monitoring, regular repayment schedules and non-refinancing threats are also mentioned by Armendariz de Aghion and Morduch (2000) as alternatives to group lending and to collateral for lending programs in transition economies.

In Cameroon, three institutional characteristics of the MFI units seem to be correlated with arrears: abnormally high or low credit/savings ratios, the age of the program and the network to which the unit belongs. The regression of failure rates on borrower and institutional characteristics reported in appendix indeed shows a significant coefficient for the indicator of resource utilization (deviation from 100% utilization of the deposits collected by the unit). The coefficient of the creation wave to which the unit belongs is also significant and is larger the older the wave. In addition some networks within the PCRD have a significant effect on arrears. These results point to the importance of the quality of the management in order to avoid arrears. The regression suggests that management factors may dominate the already reported effect on arrears of women and of the type of use of the loan by the borrower.

A similar regression analysis was not possible for CamCCUL given the lower number of units for which data were available. Nevertheless, units with abnormally low or high resource utilization rates seemed to also have high rates of arrears. In interviews, members of PCRD alluded to a problem with self-serving managers who borrowed from the network and were unable to repay. Many units of CamCCUL have large reserves lent on the network's bank or on the interbank market and this liquidity may reduce their incentive to monitor borrowers, but this is only a conjecture. As for the age of the unit, we have no clear explanation. There is inevitably a vintage effect: the newest institutions are too young to have had the time to accumulate arrears, but there is more than that. There may be a loosening of the efforts once the novelty effect is gone and some reserves are accumulated. Another conjecture about the declining dynamism may be that once the institution or its members are satisfied with their business and do not want it to grow anymore, they care less about profitability and repayment. A more cynical view claims that when subsidies are exhausted, the endgame consists in sharing the assets instead of continuing the microfinance scheme, but we did not find evidence of such opportunistic behavior.

A different hypothesis about the increase of arrears in older units is the turnover of personnel, which weakens the personal relation between the credit officer and the borrower and hence weakens the incentive or pressure to repay. In Haiti, this turnover was due to the expansion of MCN to other cities. In Cameroon, a similar effect may occur when the founders or the supporting NGO's move their effort to the development of the next wave of the network. This observation, as well as the just mentioned impact of some characteristics of the lending units in Cameroon, suggests that management and personnel have an important effect on the ability of the MFI's to deal with their specific development task.

The presence of net savers in the membership of the African programs, especially in Cameroon, may also contribute to the monitoring of the borrowers and may work as an incentive to pay, especially if the borrowers live in the same community as the net savers. The role of the resource utilization variable we uncovered both in the PCRD-regression but also in the CamCCUL reports may support this hypothesis. Although it is difficult to test this hypothesis further in Cameroon, it can be connected with a similar feature of the Roscas or tontines, where some members are also net creditors while waiting for their turn in the distribution. Moreover, Roscas operate with frequent meetings, maintaining close ties between their members. Reports of problems experienced in Latin America by pure credit programs could also support the hypothesis of the importance of net savers.

The absence of net savers in microcredit programs is sometimes explained by the lack of a banking license. Banking licenses intend to protect savers by imposing some control on financial institutions which publicly collect savings. The microcredit programs in Cameroon manage to collect savings without banking license as long as they collect it only from members and not from the general public. This is another role of membership to be taken into account in the analysis of microfinance. An alternative way to collect savings is to rely on a partner bank. In Cameroon, this may explain the existence of a formal bank on top of the CamCCUL structure, or the cooperation of PCRD with BICEC. Given that both schemes currently generate more deposits than credits, the linked banks actually collect and manage the surplus savings of the member units. In Haiti, MCN relies on Unibank to collect savings, but there is no perception of a link between depositors of Unibank and lenders of MCN. In MEB-Bosnia, the perception of link was weak at best.

Beside the techniques, however innovative, to deal with asymmetric information, the perception which seems to emerge from all experiences is the importance of personal contacts, proximity, follow-up, professionalism, and fairness[13] in the benefits and obligations of each party in the transaction (borrower, lender, intermediary).

3. Sustainability, cost and revenue

3.1. Sustainability and subsidies

A long run view of microfinance is that it should become sustainable, i.e. become able to generate enough revenue to cover the cost of funds as well as the management cost, while demonstrating that some clients who were traditionally rejected or did not dare to apply are indeed "bankable". Microfinance intends to find a way to exploit an underexploited business opportunity, i.e. to reduce a form of inefficiency in the economy. This type of activity can indeed be self-supporting.

Even within this long term and somewhat "liberal" view of microfinance, it must be acknowledged that there may be market imperfections that impede the development of microfinance and that require other forms of intervention, possibly with subsidies. One of these issues may be start-up costs (Morduch 1999b), e.g. in their risk-taking and educational dimensions. Education produces external benefits which cannot fully be recouped from the beneficiaries. This may justify an initial grant or subsidy. Another educational activity often linked with microfinance is business development services. This is a very important activity to help develop formal and sustainable livelihood among the targeted populations. This is, however, another business than microfinance, and it may be advisable to separate the accounts of the two activities. In some cases, the microfinance institution may be interested in budgetary plans as well as in accounting in order to select and monitor its clients; nevertheless it should not want to do this in their place or to mix this with the charges of the loan. What matters to the lender is the financial flow.

A further view is the "redistributive" purpose, or at least a specific targeting toward the poor. This may imply more than filling a market gap or bridging a problem of access. Some further capacities may have to be developed among the targeted population, and this may require additional interventions and specific funding.

A specific justification for subsidies may be the redistributive role which some want to assign to microfinance. By targeting the poor, microfinance would contribute to poverty relief or to equality in a better way than some other redistributive policies. The same redistributive argument is often put forward to justify public funding of schools and free education. Nevertheless the fear of a misuse of free resources sometimes suggests charging a price. The redistributive aspect of microfinance would be in the facilitation of access to the poor (see also section 5); this is also the aspect which receives most of the subsidies: technical assistance to set up the programs, business development assistance to the borrowers. In the observed programs, interest rates were not subsidized. The four institutions have a relatively low cost of funds but they pay it and have also a return on equity (even on donated equity), while they charge interest to the borrowers at market rates.

The PCRD in Cameroon benefits from specific funds and from technical assistants to face the set-up and educational costs. The other three visited institutions also benefit from some financial and technical assistance, but they all have clearly reached a stage where they aim for self-sustainability.

Table 3 lists the relevant cost and revenue items, and tries to compute a residual interest margin, as is usual in the sector. It is partly based on de Crombrugghe & de Pret (2003) and

[13] De Crombrugghe, Aurore (2001) emphasized also this fairness issue in her award-winning study in Peru. http://www.devcoprize.africamuseum.be/en/laurea01/00s3.htm

on data of MEB-Bosnia, while an estimate for Bengla-Desh can be found in Khandker (1998). Specific items are discussed further in the next subsections.

3.2. Interest revenue

The data on observed interest rates have been reported in table 1. The very high interest rates in poor countries reflect the scarcity of funds as well as the high management and information costs and the high risks. The very nature of the microfinance business makes it costly, hence a tendency to charge high interest rates.

The short maturity of the loans and the small activity of the borrowers, however, make these high rates more bearable than they may appear to an outsider. Some very small projects can indeed have a very high return. A loan for raising a pig in Cameroon can generate a 100% return to the borrower over less than a year, and more with a mother-pig. Introducing a new marketable crop like pineapple or peppers in a family farm can also generate high returns. Maturity also plays a role: borrowing at a 50% annual rate over half a year reduces actual interest charges to 25% on the borrowed amount. The high real interest rates at PCRD may nevertheless also be problematic if only as excluding some potential borrowers and leading to an underutilization of funds (although PCRD has a 80% utilization rate, higher than the country's average of 65%).

Table 3: Cost and Revenue structure: Financial activity (hypothetical case)

FINANCIAL ACTIVITY	Detail of contribution	Sub-item In % per dollar lent	Per dollar lent (in %)
1.Cost of funds		-4.5	-4.5
1.1.Capital	10% rate on 12% of funds = 1,2%	-1.2	
1.2. Deposits	2% rate on 38% of funds = 0,8%	-0.8	
1.3. Interbank	5% rate on 50% of funds = 2,5%	-2.5	
2. Management cost		-10.0	-10.0
2.1. Personnel	Annual total = 5% of loans outstanding	-5.0	
2.2. Others	Annual total = 5% of loans outstanding	-5.0	
3. Fixed costs and revenue		0.0	0
3.1. Group meeting, file assessment	Independent of amount outstanding or lent, but accounts for 10% on average	-10.0	
3.2. Entry or file fee	Average paid per loan by borrower	+5.0	
3.3. Management subsidy	Average provided by sponsors	+5.0	
4. Interest income	"market" rate per dollar lent	+20.0	+20.0
7. Provision for losses	Bank's insurance or average loss on loans	-5.0	-5.0
6. Interest margin	Residual from above items.		+0.5

Interest rates take into account the market rate available to similar borrowers in the country and the operating cost of the bank (Ledgerwood 1999). The microfinance institution often benefits from some operating subsidies or it has access to international funds at low rates due to a good rating or to the guarantee of an international institution. It is then obliged by its benefactors not to overcharge borrowers, but it is not advisable that it would be seen by other local financial institutions as an unfair competitor. A competitor to banks and moneylenders it must be, to stimulate improvement in the financial system, to enlarge the outreach of financial activity, but not simply to undercut prices or generate waiting lists (Robinson 2001). Low interest rates can also be misunderstood and are then as hard to recover as high interest rates because people may perceive the program as charity instead of lending (Ledgerwood 1999). This especially applies to micro-credit schemes run by NGO's of which the population is used to receive goods and services freely instead of being charged. Finally, abnormally low prices would not only distort the financial business but also the goods market, where borrowers sell their output.

3.3. Costs of funds and of operation

A major advantage of MFI's is their access to funds which are relatively cheap. Capital is not free, because even in the case of a grant, it should be put to good use, compared to other institutions where the grant could be used. Deposits may be relatively expensive, given the need and the desire to stimulate savings (PCRD applies a 2% monthly rate on deposits). Interbank borrowing is cheap thanks to the good reputation of microfinance and thanks to the guarantee offered by international institutions or NGO's (as was especially the case in Bosnia, where MEB borrowed at about 4% in 2001).

The major problem of microfinance is the high operating cost relative to the amounts lent. Personnel are a major item, and understandably so. Professionals in Cameroon noted the importance of the external and subsidized support offered to PCRD in Cameroon. MEB in Bosnia and MCN in Haiti were perceived by most observers as devoting a lot of attention to the quality and performance of their staff and this is also the official policy line of these MFI's.

Fixed costs can partly be covered by fixed fees. This is also where grants are most appropriate. The problem with grants is that they can hardly be permanent, while fixed costs come with each new loan. A similar problem arises with groups. Groups, although costly to set up, are useful at the beginning of an attempt to reach new clients, but in the long run they lose their grip on their members, and also often lose their motivation to repay once everybody has been 'served'. Even for groups then, a set-up cost charge could be added to the interest charges.

Losses occur even with well-selected and well-monitored clients. Political crises, natural accidents, robbery or simply personal health problems may lead to impossibility to repay. The microfinance institution can partly insure this credit risk with large insurance companies (de Pret 2002)[14]. Anyway it should be taken into account. Pressuring clients who are unable to repay and bear no personal responsibility for their failure is not what microfinance wants to be known for. Exogenous shocks and accidents (as opposed to asymmetric information risks) inevitably raise the cost of loans. It is worth investigating more carefully the insurance possibilities also at the borrower's level. An example is health insurance, which could give access to better health care, could restore the income-generating capacities of the borrower faster and hence could contribute to better repayment performance. In this specific case, and possibly in others like replacement of damaged tools, insurance companies could offer protection to the borrower and hence to the lender at a better rate than the risk premium included in the interest rate.

3.4. Managing the cost of arrears

A major achievement of microfinance remains nevertheless the demonstration that arrears and default are very limited, despite the very low resources of the borrowers. With the possible exception of CamCCUL, this is confirmed by our observations. Table 4 gives an idea of the order of magnitude of arrears that were measured in the observed institutions.

[14] Credit insurance appeared as a possibility in the Bosnian case only, not in the other observed institutions.

Table 4: Arrears

Observed institution	Definition of arrears	Share of arrears[15]
MCN Haïti	21 days	12%
PCRD 152 reports	2 months	10%
PCRD 10 visited	2 months	5%
CamCCUL 10 visited	2 months	35%

The observed MFI do not let arrears unnoticed and charge immediately extra interest on the outstanding amounts. Arrears decline relatively fast after the period mentioned in table 2, because then extra pressure is put on the delinquent borrower. In the interviews of 43 borrowers in Cameroun, we heard that 37 of the 90 repaid loans had been repaid after the maturity, and that the average extension was 9 weeks.

We don't have information about explicit default procedures to close the account of borrowers who are unable to pay. This issue deserves further study, especially in cases of exogenous shocks and given the purpose of microfinance to be an instrument to fight poverty or to encourage risk-taking by new entrepreneurs. It should be noted that bankruptcy procedures are not always available to individuals even in industrial countries where bankruptcy is well organized for commercial firms. Over-borrowing is a source of poverty in industrial countries as well as in poor countries, despite the existence of social security safety nets. Group-lending of the Grameen-type with full solidarity of the whole group for each loan (see section 2.2.) may be a way to transfer individual default problems to the other members of the group, leaving the bank only with the less likely cases of group default or rather of default of each member of the group.

Despite the existence of arrears, none of the observed institutions reported serious financial difficulties or recent increases in subsidies. Nevertheless, the arrears at CamCCUL are problematic, even if they are covered by rollovers and by income from other investments.

4. Competition and alternatives

Microfinance fills a gap between formal banks and informal moneylenders (Robinson 2001). Formal banks do not lend small amounts and do not lend either to people who cannot offer material collateral. They post relatively low interest rates but simply reject clients which they perceive as too costly or too risky. Formal banks do not raise interest rates because they do not want to frighten the safest clients and they are afraid of worsening the quality of their portfolio through adverse selection.

Private moneylenders charge high rates. They can do this because they seem to be in a monopoly position. This monopoly position is strengthened by the fact that they often provide some basic input to the borrower. This position is also strengthened by the lender's relatively exclusive knowledge of the borrower's ability to pay and by the possibility to put pressure on the borrower. These lenders thus bridge the information asymmetry gap relatively easily through personal contact and through other business relations with the borrower. Despite the risk, especially the accidental risk, the margin of the moneylender is often large. The borrower may nevertheless sometimes prefer to pay an interest rate premium to the moneylender than to face the conditionality and the administrative costs (paperwork, group meetings, …) imposed by the MFI.

[15] In % of outstanding loans, not outstanding amounts lent.

Analyzing the competition to MFI's is difficult. In Cameroon, women clearly have access to "tontines" which could be a serious competitor for microfinance, especially for the kind that targets household needs. Nevertheless, tontines and microfinance do not necessarily respond to the same needs (see section 5.2. below). Two observations seem to support the hypothesis that "tontines" are indeed competitors. First, there were more men than women in the microfinance programs observed, both as members and as borrowers. Second, women didn't seem to have better repayment rates than men in the observed institutions and networks. This last observation goes against most expectations, but could be explained by the fact that the most reliable women found money elsewhere, possibly in a "tontine". It is nevertheless possible to imagine that a "tontine" could join a microfinance program and could benefit precisely from "group lending", or could fulfill the role of "group formation" or of "borrower selection".

In Haiti, MCN operates in a higher market segment than the cooperatives of Cameroon. MCN's competition comes then from two other MFI's in the capital city and from formal banks for the richest clients. For the small loans, competition comes from credit cooperatives. Credit cooperatives operate only with members, who pay a member fee and take part in meetings. Cooperatives operate with smaller amounts. Roscas-type of collective savings also exist in Haiti and are called "Sol" or "Sabotage". Some formal banks in Haiti now consider setting up MFI structures similar to MCN.

We noticed that interest rates were higher in the MFI's than in banks and lower than with private moneylenders. We cannot correlate default with the borrower's possibility to move to another bank, but we note in all four experiences that getting further loans from the same bank is a major incentive to pay installments in time. PCRD-Cameroon so far explicitly chooses to operate in villages where it is the only provider of microfinance services. In Haiti, information-sharing about borrowers (black and white lists of borrowers) among banks is discussed and MFI's just started sharing black lists. The effect of competition on interest rates, on repayment rates and on credit-rationing deserves further study and may lead to recommendations on regulation and on information-sharing in the sector.

5. Impact

5.1. Outreach

The impact of microfinance institutions in a market or a community should be judged according to the general economic principles of efficiency and of distributive equity, taking into account the specific targets and constraints of the institutions themselves. A first issue is the ability of the institution to reach a large enough share of a geographical or economic community or of a group of more specifically targeted clients, especially when it specifically intends to target the poor.

The contribution of the observed schemes to fighting poverty by reaching especially the poorest is hard to establish. A minimum of schooling seemed necessary to participate in Cameroon. MCN in Haiti and MEB in Bosnia did not specifically target the poor, but they targeted small businesses which could not find the appropriate service elsewhere and both succeeded in filling this gap.

5.2. Efficiency gains and improved living conditions

The main difficulty in impact studies is to get a view of the evolution through time of the welfare of the beneficiaries. Ideally, such an analysis would require repeated observation of both the beneficiaries and of a test group. In the absence of such long and controlled observation, indications on the impact of microfinance services can be obtained from the declared use of funds or from the motivation and the satisfaction of clients.

PCRD Cameroon operates in a rural environment. Its loans are mainly seasonal loans. Even if they only contributed to consumption smoothing, they would already be welfare enhancing. They also alleviate temporary constraints. The main declared use of credit in the 152 PCRD units sample is agricultural (seeds, fertilizers, less often tools), reaching 58% of all credits. School fees were often mentioned in interviews where 17% of borrowers claimed to use their loans for education purposes and 15% claimed health purposes, but loans falling under the item "social purposes" are only 7% of the loans in the 152 PCRD reports. In these reports, 30% of the loans are recorded as financing commercial activities.

CamCCUL Cameroon operates in a more densely populated area than the PCRD. Some members have urban activities. Loans contribute also to consumption smoothing and 40% goes to commercial working capital. Housing may also be a destination of funds, but short-term loans will mainly finance repairs or small improvements, although people in West-Cameroon seem to want to invest in housing. There is almost no evidence that loans from the PCRD or from CamCCUL contribute to investments in business development in Cameroon. Even the contribution to working capital for trade seems limited, if only by the size of the loans.

It is difficult to capture indicators of welfare improvement before and after participation in a credit program, because people do not clearly remember dates of significant purchases or of changes in their living conditions. Satisfaction indicators are more easily available. Out of 60 interviewed members of the PCRD, 43 were or had been borrowers, taking 108 loans in total. Of these 43 borrowers only 11 had taken a single loan, while 17 had borrowed three times or more. Only 6 out of 43 borrowers said they were unsatisfied while 15 were satisfied and 22 were very satisfied.

The importance of consumption smoothing in Cameroon, raises the issue of the difference between microcredit and participation in a tontine. A first difference may be the explicit interest charged on a microcredit. A second difference may be the timing of the microcredit, i.e. the simultaneity of the seasonal agricultural and school loans, while tontines often distribute shares in savings to members in turn over the year. There are, however, many exceptions to strict rotation in tontines like the purchase of a turn, or like annual tontines promoted by NGO's or money managers (who offer to keep the savings of the tontine in a safe place). Third, tontines assemble people of similar wealth conditions, while microfinance may match net savers with net borrowers.

The distinction between a microcredit scheme and a mutual insurance fund is another issue, especially if the loans are funded through own funds of the members and if the system also has reserves. A key difference is the repayment with interest of a microcredit and the possibility to obtain a microcredit with no or limited prior savings. The repayment obligation, however, makes the scheme more costly and risky for the borrower than the payment received by an insured person. Insurance, however, and especially mutual insurance, seems to face cultural hurdles in some contexts due to many problems of trust and of mutual understanding. The verification of the accidental nature of the loss is a problem. The fact that those who do not face accidental losses do not have to receive payments from the fund despite their long record of contribution is sometimes poorly understood (Platteau 1997). The heterogeneity of the insured may cause adverse selection effects and problems in establishing the right charges. The trust in the holder of the insurance funds is also a challenge, and in some communities a bigger one than the trust in a banker.

In Haiti, the loans of MCN mainly provide working capital for commercial activities and other small businesses. It is also hard to measure the satisfaction of the borrowers, the growth of their business or of their welfare. Nevertheless, the number of clients coming back for further loans, there as in Cameroon, is an indication of satisfaction[16], and so is the growing number of clients.

In Bosnia, we did not collect data on impact, but there was already a clear impression in 2002 that the bank was growing with its clients, moving toward the segment of small and medium enterprises, away from the microenterprise or starter. About a year later the bank changed its name to reflect this evolution: from Micro Enterprise Bank to ProCredit Bank, the brand name of the network in its most advanced markets.

The Bosnian case may illustrate the paradox of poverty-fighting institutions. A proof of success is when the targeted people get out of poverty. Then the institution must either refer them to other service-providers which these people can now afford or it must transform itself to offer these services. In the case of microfinance, this is a healthy evolution for the institution. For society as a whole, the need may remain to create new schemes to reach the poor which remain.

The public targeted by MCN in Haiti and even more so by MEB in Bosnia is clearly different from this targeted by PCRD and CamCCUL in Cameroon. Nevertheless, all four proved that they filled a gap in the market. They thus contributed to economic efficiency by exploiting unexploited business opportunities, and hence they contributed to the welfare of their customers, while becoming profitable themselves as well, most clearly so in Bosnia. They do it with different means and organizational structures, an issue indirectly raised in Morduch (2000).

5.3. Empowerment, education and redistribution

The purpose of most promoters of microfinance is to help people out of poverty, not only by giving them the financial means of developing their autonomy but also by giving them access to productive activities (Sen 1999)[17], education and even empowerment, especially of women (e.g. Johnson 2000), i.e. a place and a voice in society. This is hard to measure and often involves other services than pure financial services, or even than financial services coupled with business development services. The redistributive effects are even harder to measure.

Regarding empowerment of women through financial systems, Anderson and Baland (2001) discuss the hypothesis that women use Roscas in Kenya or microcredit elsewhere to secure their savings from consumption by their husband or family. We do not have income data of women in Cameroon to test such an hypothesis, but the importance of saving services observed in Cameroon indicates that people value highly the possibility to set money aside, even if they cannot say (or were not asked to say) from whom or for what. Nevertheless the diversion of resources from the household via microfinance schemes may not always be a welcome form of empowerment.

The role of credit in paying for school and in making consumption smoothing possible in Cameroon may be seen as a preventive way of fighting poverty, i.e. keeping people out of dire necessity (as long as they can generate repayment means in better times). The possibility to roll over a loan, while contributing to the worrying statistics on arrears and while very costly for the borrowers at the going interest rates in Cameroon, may be seen as an

[16] In the portfolio of 7471 loans disbursed between 1999 to 2002, 4612 loans (62%) went to returning clients.
[17] The indirect social effects of income-generating activities should not be underestimated : better schooling of children, and other socially and economically desirable consequences.

extension of the consumption-smoothing role of loans. There is obviously a moral hazard[18] effect to any such implicit insurance scheme as to explicit ones[19]. Nevertheless, the access to credit may also have an empowerment effect : by allowing increased risk-taking it may increase the gains and expected income of the risk-taking entrepreneurs-beneficiaries.

The participation in formal activities with well defined rights and obligations also plays an educative role, especially in Africa where personal relations often dominate contractual relations. In this respect, the often admired role of group-lending plays an ambiguous role, and it may be interesting to observe that it is not the preferred form of credit-provision by the institutions observed here. The strong organization behind the microfinance institutions, especially under IPC leadership in Bosnia and in Haiti, also plays and important role in demonstrating how a business can be run.

Business development services and business plans do not necessarily belong to the core-business of microfinance but contribute also to the education and empowerment of the small entrepreneurs. They are relatively costly to set up and they absorb the largest part of the subsidies observed in microfinance development projects. In the PCRD-Cameroon, the supporting NGO's explicitly provided manpower to start up the local units, support the management of the network and provide educational services.

The poverty-fighting role of microfinance has thus many aspects. The main one is an institutional efficiency gain, i.e. filling a gap in the market, by creating institutions which offer a service which would not be offered to people who have no access to alternatives. Nevertheless some set-up and access cost must be covered by finding resources outside the beneficiaries; this has a more explicit redistributive dimension. Moreover, the bargaining power of the beneficiaries increases, which is another redistributive dimension affecting the family relations in some cases or the employment opportunities in some other cases.

6. Conclusion

The success of microfinance demonstrates that it responds to a strong demand. It fills a gap in the financial markets or in financial intermediation; it is not just the latest fashion in development assistance or in commercial banking.

The observations of four experiences on the field have uncovered two very different types of microfinance. The first one reaches mainly low-income households, while the other one reaches small entrepreneurs. Both types respond to specific demands with specific means, structures and services.

Low-income households demand credit to face temporary hardship, to finance seasonal expenditure like seeds or school fees, and only a few of them demand working capital for trade or farming. This form of credit can be seen – to some extend – as a substitute for savings, for a reserve-capital, possibly even for an insurance scheme. These households were observed in Cameroon as members of cooperative microfinance institutions which collected actively the savings of their members and tended to lend less within the community than they collected. The surplus was lent on the interbank market. This observation, together with the type of credit issued is a strong indication of the importance of reliable savings organizations to help people out of poverty, or to keep them from falling into it. The

[18] Moral hazard can take the form of lower effort but also of higher risk-taking. Both increase the utility of the insured and both are costly for the insurer and can discourage him, but the second is more likely than the first to generate capital which will protect the owner from poverty and will contribute to overall income growth.

[19] The lack of information on explicit default procedures was noted in subsection 3.4. on arrears. The implicit insurance that appears here as impact and appeared in sections 3.3. and 3.4. as cost, may deserve further research.

role of groups in cooperative organizations may be to contribute to the trust in the savings-collection system, as much as to ensure the more often discussed selection and monitoring of the borrowers. The observation also suggests that there is a large and partly untapped savings potential among low-income households. This would be confirmed by observers of state and cooperative savings banks of 19th century Europe.

Small entrepreneurs demand credit for working capital and sometimes for equipment. They were observed in Bosnia and in Haiti as clients of formal credit institutions targeted to their needs and run by specialized and well trained staff. In Bosnia especially, some of the clients developed their business successfully into larger enterprises. Nevertheless, the specific approach to small entrepreneurs proved useful in filling a gap in the market. The observed MFI's were lending more than they collected in savings, but did not endanger their equilibrium because they had access to funds at favorable market rates. The price of funds was nevertheless high enough to prevent squandering. These MFI's did not rely on group mechanisms to select or monitor such clients, but did well ask for personal guarantees and good reputation. The effectiveness of the enforcement mechanisms available, the monitoring developed by the MFI's and the desire of the borrowers to develop a long term relation with the bank made it possible to obtain a good repayment rate without relying on group mechanisms or on the social pressure of the net savers of a cooperative.

Microfinance, including saving services, thus seems to offer a longer run and more open development perspective to its beneficiaries than development assistance. It supports sustainable mechanisms of development and of poverty-reduction. Indeed, on the temporary hardship side, it demonstrates the savings potential the community itself. On the business development side, it shows results in the form of a return on investment.

By filling a gap in the market, microfinance frees well being and/or investment from constraints; it enlarges the opportunity set of the people. Our observations suggest that management costs per dollar remain high, and that a high quality management cannot be replaced by ready to use recipes and cannot be transferred to inexperienced or not-caring people. Clients are sensitive to the quality of the management. Overcoming the set-up cost, the information gap or the lack of trust remains a challenge. For institutions which have taken a good start, keeping the standards of quality in management and aiming at sustainability is the hard test of the long run development promise.

REFERENCES:

ANDERSON, S. & J.M.BALAND (2001), "The Economics of ROSCAS and Intra- household Allocation", *Quarterly Journal of Economics* 117, 3 (August), 963-996

ARMENDARIZ DE AGHION, B. (1999) "On the design of a credit agreement with peer monitoring" *Journal of Development Economics*, 46, 1-18.

ARMENDARIZ DE AGHION, B. & MORDUCH, J. (2000) « Microfinance beyond group lending » *Economics of Transition*, 8, 2, 401-420.

BANERJEE, A., BESLEY, T., & GUINNANE, T. (1994) "Thy neighbour's keeper : The design of a credit cooperative with theory and test" *Quarterly Journal of Economics*, 109, 2, 491-515.

BESLEY, T. & COATE, S. (1995) "Group lending, repayment incentives, and social collateral" *Journal of Development Economics* 46, 1-18.

CASTAIGNE, Florence (2002) "La microfinance, un outil de lutte contre la pauvreté: Application au Cameroun" Master Thesis, September 2002.

COLLIN, Jean-Denis (2002) "Microfinance et asymétrie d'information : Une étude de cas au Cameroun" Master Thesis, September 2002.

de CROMBRUGGHE, Alain & de PRET, Valentine (2003) "Development of a starter loan in microfinance: Conceptual design of the product" , Namur Working Paper 245, and "Operational Parameters", Namur Working Paper 246.

de CROMBRUGGHE, Aurore (2001) « La crise du microcrédit rural dans la région de Cusco (Pérou): analyse institutionnelle, de satisfaction et socio-politique » Louvain-la-Neuve : UCL Département d'Administration et de Gestion (IAG) 132 pp.
http://www.devcoprize.africamuseum.be/fr/laurea01/00s3.htm

de MARCHANT, Olivia (1998) "Programmes féminins de crédit de groupe: Théorie et évidence empirique de Bolivie" Master Thesis, September 1998.

de PRET, Valentine (2002) "Lending to micro-starters: Application to Bosnia & Herzegovina" Master Thesis, September 2002.

D'HUART, Patrick (2003) "La gestion du risque crédit en microfinance: Le cas de MCN en Haïti" Master Thesis, September 2003.

GHATAK, M. (1999) "Group Lending, Local Information and Peer Selection" *Journal of Development Economics* , 60, 1, 27-50.

GHATAK, M. & GUINANE, T.W. (1999) "The Economics of Lending with Joint Liability: Theory and Practice" *Journal of Development Economics* , 60, 195-228.

JOHNSON, Suzan (2000) «Gender Impact Assessment in Microfinance and Microenterprise : Why and How » *Development in Practice*, 10, 1 (February).

KHANDKER, S.R. (1998) *Fighting Poverty with Microcredit : Experience in Bengladesh*, Oxford University Press.

LEDGERWOOD, Joanna (1999) "Microfinance Handbook : An institutional and financial perspective" Washington D.C.: World Bank.

MISHKIN, F.S. & EAKINS, S.G. (2000) *Financial Markets and Institutions*, New-York : Addison-Wesley.

MORDUCH, J. (1999a) "The Microfinance Promise" *Journal of Economic Literature*, 37, Dec., 1569-1614.

MORDUCH, J. (1999b) "The Role of Subsidies in Microfinance: Evidence from the Grameen Bank" *Journal of Development Economics*, 60, 1 (October), 229-248.

MORDUCH, J. (2000) "The Microfinance Schism" *World Development* 28, 4 (April), 617-629.

PLATTEAU, J.Ph. (1997) "Mutual Insurance as an Elusive Concept in Traditional Rural Communities" *Journal of Development Studies* 33, 6, August, 764-796.

ROBINSON, M. (2001) *The Microfinance Revolution*, Washington D.C. : The World Bank.

SCHREINER, Mark (2002) "Scoring: the Next Breakthrough in Microcredit?" Paper prepared for the Consultative Group to Assist the Poorest, http://www.cgap.org

SCHREINER, Mark (2004) "Benefits and Pitfalls of Credit Scoring for Microfinance" *Savings and Development*, 1, 1.

SEN, A. (1999) *Development as Freedom, …*

STIGLITZ, J. (1990) Peer Monitoring and Credit Markets, *World Bank Economic Review*, 4, 351-366.

STIGLITZ, J. & WEISS, A. (1981) „Credit rationing in Markets with Imperfect Information" *American Economic Review*, 71, 3, 393-410.

STIGLITZ, J. & WEISS, A. (1983) "The Incentive Effect of Terminations: Applications to the Credit and Labor Markets" *American Economic Review*, 73, 5 (December), 912-927.

TOWNSEND, Robert M (2003) "Microcredit and Mechanism Design" *Journal of the European Economic Association*, 1, 2-3 (April-May), 468-477.

VARIAN, H. (1990) "Monitoring Agents with other Agents" *Journal of Institutional and Theoretical Economics*, 146, 153-174.

APPENDIX 1:

REGRESSION ANALYSIS OF THE FAILURE RATE OF 152 PCRD AFFILIATES

Dependent variable : ln (1 + failure rate)			
Regressor	Coefficient	Standard error	Significance (Prob.)
Constant	**-0.446**	**0.111**	**0.01%**
Regional network (1):			
Nyong & Mfoumou	**0.286**	**0.061**	**0**
Mayo Sava	**0.278**	**0.052**	**0**
Mayo Louti	-0.024	0.057	67,94%
Mayo Danai	**0.328**	**0.053**	**0**
Lekie Mbam	-0.006	0.056	90.89%
Diamare	-0.001	0.058	98.96%
Haute Sanaga	**0.211**	**0.054**	**0.01%**
Type of Benficiaries(2):			
Share of group credit	0.068	0.135	61.70%
Share of woman credit	**0.206**	**0.095**	**3.05%**
Type of Credit (3):			
Share of social credit	1.072	13.20	93.53%
Share of Trade credit	0.068	0.101	49.99%
Share of Agricultural credit	0.014	0.094	88.18%
Management (4) :			
Resource utilization	**0.068**	**0.023**	**0,29%**
Origin of affiliate (5):			
Wave 3	**0.115**	**0.044**	**0,87%**
Wave 2	**0.264**	**0.043**	**0**
Wave 1	**0.349**	**0.046**	**0**
Statistics and notes: R-squared : 62,5% Tobit regression using E-Views. (1) Other regional network = Mayo Kani. (2) Other borrowers = Men. (3) Other type of credit = Housing and others. (4) Absolute value of [1-(credits/deposits)]. (5) There were 4 waves of creation of PCRD affiliates, wave 1 is the oldest.			

APPENDIX 2 :

CREDIT PERFORMANCE OF 7471 LOANS
DISBURSED BY MCN-HAITI BETWEEN 1 NOV 99 AND 31 OCT 2002

	By client, size or use				**Arrears > 21 days** as % of	
Line	Client	Size	Use	Total	Line	All loans
R	**R**			4612	**8,63**	38,27
N	N			2859	**21,44**	61,73
1		**1**		1626	**10,21**	21,76
2		**3**		1623	**13,37**	21,72
3		**2**		422	**14,87**	56,51
T			**T**	6242	**11,41**	83,55
S			S	958	**22,13**	12,82
P			P	271	**32,10**	3,63
	Combined characteristics				**Arrears > 21 days** as % of	
Line	Client	Size	Use	Total	Line	All loans
1	**R**	1	**T**	588	**5,61**	7,87
2	**R**	1	S	34	**5,88**	0,46
3	**R**	2	**T**	2263	**7,82**	30,29
4	**R**	3	**T**	1037	**7,91**	13,88
5	N	1	**T**	905	**11,82**	12,11
6	**R**	3	S	184	**12,50**	2,46
7	**R**	2	S	354	**14,41**	4,74
8	**R**	2	P	96	**15,63**	1,28
9	N	3	**T**	266	**20,68**	3,56
10	**R**	1	P	19	**21,05**	0,25
11	N	2	**T**	1183	**21,81**	15,83
12	N	1	S	53	**22,64**	0,71
13	N	1	P	27	**29,63**	0,36
14	**R**	3	P	37	**29,73**	0,50
15	N	2	S	256	**35,16**	3,43
16	N	3	S	77	**44,16**	1,03
17	N	2	P	70	**52,86**	0,94
18	N	3	P	22	**54,55**	0,29
Total				7471	**13,53**	100
	R = Returning N = New	1 = Mini 2 = Micro 3 = Petit (1 = smallest)	T= Trade S = Services P = Production			